Object
Construction of basement structures of a 42 storey office tower on 9 storey retail podium.

Project Description
Construction of bored pile foundations, diaphragm walls and deep excavation works for 2-3 level basements construction.

Type of Work
Foundation piling, diaphragm walling and substructure works.

Owner
Land and House Property Company Limited.

Designer
Palmer & Turner (Thailand) Limited.

Project Schedule
2008-2009

Construction Method
• Bored piling and diaphragm walling
• Deep excavation to –13.0m with diaphragm walls using bottom up construction method.

Construction Details
Foundation bored pile:  
- φ0.80mx57m = 22
- φ1.20mx57m = 65
- φ1.50mx57m = 183
- φ1.80mx57m = 25

Diaphragm Walls: 8,172 sq.m. (0.80m thick x 18m deep)

Volume of Excavation: 95,000 cu.m.
Temporary Bracing: 1,987 tons
Temporary Platform: 3,807 sq.m.
Concrete Volume: 24,295 cu.m. (substructure)
Steel Reinforcement: 4,350 tons (substructure)
Basement Floor: 30,909 sq.m.

Subsoil Conditions
Soft clay: 2.5-9.0m
Medium clay: 9.0-15.3m
Stiff to very stiff clay: 15.3-40.0m
Hard clay: 40.0-42.8m
Dense Sand: 42.8-60.0m

No. 144, Prayasuren Road, Bangchan, Khlong Sam Wah, Bangkok 10510, Thailand. Tel. (662) 919-0090 to 97, Fax. (662) 919-0098, 518-3088. Email: sealco@seafco.co.th, Homepage: www.seafco.co.th.